CONTENTS:

November 1999

CHEMICALS, PETROLEUM AND NATURAL GAS

PROJECT UPDATES

Enhanced Oil Recovery (EOR)

The key issue with the oil production industry is that it is in decline due to foreign competition and U.S. regulations. It was "hammered" by the recent decline in oil prices, causing additional staff cuts in an already personnel short industry. Even with the current return to good oil prices, the industry is now more conservative than ever. This industry needs help! Nine generic opportunities for utilities and energy service providers to help this industry (and themselves) have been identified. These suggest numerous opportunities for Tailored Collaborations. For more information, see "Electrotechnology Opportunities in Enhanced Oil Recovery Operations: Scoping Study" (TR-113836), (Click on the blue link to view the abstract and to download this publication), or contact Sam Woinsky at 281-419-1122, fax 281-419-0811 or epricpc1@ix.netcom.com.

Work Nears Completion on Maximizing Water Reduction For The Process Industries

The key issues, seven situations with slipstream TC Demo project potential, and promising technologies have been identified. The technologies include Vapor Electric Compression Vacuum Evaporation which is a Zero Discharge enabler, Freeze Concentration, Direct Osmosis Concentration for Bio-Sludge Dewatering, Combined Reverse Osmosis/Electrodialysis, other membrane processes, and the very versatile Partial or Complete Electrolytic Destruction of Organics. The project report will be available in 1999. If you are interested in these very promising technologies, contact Sam Woinsky at 281-419-1122, fax 281-419-0811 or epricpc1@ix.netcom.com.

Electrochemical Promotion of Catalysis

This is a SS&T initiative. Current work is directed towards Ammonia and Ethylene Oxide production. However, the effect is generic, and it applies to a variety of chemical reactions, and works on many catalyst-support combinations. The effect can be very significant (up to 100 fold enhancement of reaction rates). Application concepts are being developed and industrial collaboration is being sought. This project is at an earlier stage of development than what our members have traditionally supported (laboratory demo and development of principles for scaling to pilot and industrial operations). However, industrial interest and potential are very high. If you are interested in this very promising technology, contact Sam Woinsky at 281-419-1122, fax 281-419-0811 or epricpc1@ix.netcom.com.

MEETING WRAP-UPS

CWRT/EPRI Water Management Workshop/Potential TC Projects

This was a very successful collaboration between the Center for Waste Reduction Technologies (CWRT) and the EPRI Chemicals, Petroleum & Natural Gas (CPNG) Center. The CWRT is a part of the American Institute of Chemical Engineers,

with more that 30 leading chemical companies as members. The workshop was held at Monsanto's headquarters in St. Louis.

A number of important technologies which have TC project potential were covered, including Water Pinch which is a door opener, the Pell Frischmann/BG Technology/EPRI Water Problem Solution Alliance (WPSA), Electrodeionization of Boiler Feedwater, Freeze Concentration of Hazardous Wastewater, High Capacity Aerobic Membrane Biological Treatment, Microwave Emulsion Breaking, 3D Cathode Heavy Metals Removal/Recovery, and Advanced Distillation which has the US potential to save up to 0.5 x 1015 BTUs and 0.5 x 1012 pounds of water per year. If you are interested in any of these technologies, contact Sam Woinsky at 281-419-1122, fax 281-419-0811 or epricpc1@ix.netcom.com.

Petroleum Environmental Research Forum (PERF) Fall Meeting

PERF is a collaborative organization for the Petroleum Industry's environmental issues and solutions. All the major petroleum companies are members of PERF. Collaborative environmental projects within these members are organized at the group's meetings, which are held three times every year.

EPRI was invited to the Fall meeting in Chicago and was offered the opportunity to talk about the Environmental R&D programs. PERF is mainly interested in the "Environmental Science" programs offered by EPRI's Environmental Division. At this meeting, Ammi Amarnath and Kathy Trudell presented EPRI's environmental activities across the board. There was immediate interest in EPRI's projects in Mercury abatement, Selenium research, and Ozone technologies. In the near future, CPNG will be offering specific projects in these areas for collaboration with PERF. There will be opportunities for involvement of member utilities if any of the projects are carried out at their customers' sites. For more information on the PERF activities, please contact Ammi Amarnath at aamarnat@epri.com.

Gas/Electric Partnership Workshop II

A workshop of the EPRI Gas/Electric Partnership was held October 26-27, on Operational/Economic Synergies, at facilities of Williams Gas Pipeline Transco in Houston, Texas. Topics included electric compression for gas transmission and gas supply for power generation. The workshop was a follow-up on one held May 20-21, at El Paso Energy in Houston. Among the underwriters and sponsors were AEP Resources Service Company, Allegheny Power, Central & South West Services, Columbia Gulf Transmission, Duke Energy, El Paso Energy, New Century Energies and Williams Gas Pipeline Transco. Attendance for both the May and October workshops was at capacity and there was an increase of 30% for the latter workshop.

Speakers included Winston Johnson, Vice President Engineering, Tennessee Gas Pipeline & Eastern Group, on an "Update on the El Paso Energy Electrification Project"; Lew Posekany, Senior Vice President Group Planning & Development, Williams Gas Pipeline, on an overview of gas/electric convergence; Mike Stockard, TXU Electric, on "Status of Texas DSM Project Funding"; and Anders Johnson, El Paso Energy, on "Trends in Capacity Control" for gas pipelines.

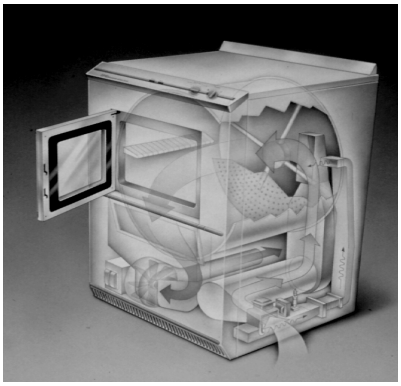
Action items were to assemble a task force to dialogue with the Federal Energy Regulatory Commission (FERC) on gas/electric convergence issues, a workshop or symposium on motors and drives in the spring, and a short course for presentation at the Gas Machinery Conference in October, 2000. The task for will be addressing the issue that FERC regulations often inhibit efficiency improvements such as those associated with electric compression, thereby imposing a disincentive to use this and other technologies. For more information about this topic, contact Ammi Amarnath at aamarnat@epri.com.

FIBER, APPAREL, CARPET AND TEXTILE

PROJECT UPDATES

Textile Office Installs Pilot Microwave Tumble Dryer at the NCSU College of Textiles

The EPRI pilot microwave dryer has been installed at the North Carolina State University College of Textiles in Raleigh, NC. The pilot microwave tumble dryer has a capacity of 10 pounds and is powered by three 1.8 kW magnetrons. Textile manufacturers and commercial and industrial cleaning or laundering facilities have an opportunity to utilize Microwave (MW) technology to improve the tumble drying process. Feasibility trials can be run by sending samples to the EPRI Fiber, Apparel, Carpet & Textiles Office (FACTO). In-plant demonstrations can be scheduled after successful feasibility trials. Click on the blue link for additional information: "Microwave Drying of Textile Products" (PO-111957).



EPRI Pilot MW Dryer for Industrial Demonstrations

The Textile Office Completes Ozone Laundering and Microwave Drying Feasibility trials for TVA and a Large Correctional Facility

Phase 1of the Project, feasibility trials, has been successfully completed. On-site demonstrations of Ozone Laundering and Microwave Drying will be scheduled in January, 2000.

For more information on this project, please contact the FACT Office through the EPRI Customer Assistance Center.

PULP, PAPER AND FOREST PRODUCTS

PROJECT UPDATE

Target Plant Assessments

The US Department of Energy, Office of Industrial Technology, is once again offering Target Plant Assessments with 50% cost sharing up to $75,000. The Pulp, Paper and Forest Products Office (PPFPO) has assisted paper companies in the preparation of the grant applications and in performing the assessments. The next solicitation is due in December with applications to be submitted by March, 2000. If a paper company is interested in sharing results, successes and experiences, and has a commitment to implementation, please contact the PPFPO through the EPRI Customer Assistance Center for more information.

MEETING WRAP-UPS

Industrial Wastewater Conference

Recent activities in the PPFPO include participation in an Industrial Wastewater Conference sponsored by BC Hydro in Vancouver, BC. Three of the presentations were concerning technologies that have achieved commercial readiness through research efforts of the PPFPO. These technologies are: Impulse Drying of Sludge, Effluent Treatment Plant Cost Reduction Through Aerator Optimization and Online BOD Sensor Development.

Presentations given at the conference are available upon request from the PPFP Office. Additional information can also be found in the following recent center publications: "Development of an Online BOD Sensor" (TR-113791) and "Optimal Siting and Control of Aerators in Secondary Treatment Systems- Volume 2" (TR-113811-V2). (Click on the blue links to view the abstracts and to download these publications).

Institute of Paper Science and Technology's Research Advisory Committee Meeting

A presentation was given to the Institute of Paper Science and Technology's Research Advisory Committee, which consists of technology officers from the major pulp and paper companies. The presentation topic was "Deregulation and Paper Company Impacts" which explained current status of legislation, what paper companies should do in preparation and a primer about hedging product versus energy supply. This information was taken from the panel discussion at the recent TAPPI (Technical Association of the Pulp and Paper Industry) National Engineering and Product Quality Conference in Anaheim, California. Panel presenters were from two major paper companies, a leading industry energy consultant, two leading energy service/ marketing companies and one from the California Energy Commission. The panel was organized and moderated by the Director of EPRI's Pulp, Paper and Forest Products Office.

For more information about this presentation, please contact the PPFPO through the EPRI Customer Assistance Center.

MATERIALS FABRICATION

PROJECT UPDATES

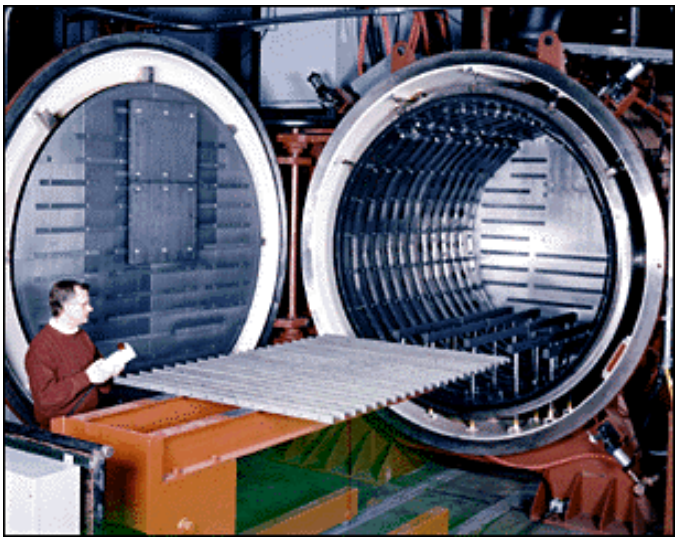
New Simulation Tool to Aid IR Oven Design

The design of an infrared (IR) oven can often involve extensive testing and development in an oven manufacturer's laboratory. This process is time consuming and costly. In some cases, it can lead to conservative oven designs that incorporate more heating capacity than necessary and, in the other extreme, ovens that do not function properly. The Center for Materials Fabrication (CMF) is conducting a project that will use a variety of numerical simulation techniques to evaluate different IR oven arrangements for their ability to uniformly heat a given part. The simulation tool will permit comparisons of different oven designs for performance to desired specifications. Use of this tool will increase the confidence of new users of IR technology and reduce development and equipment costs for new IR applications. CMF plans to offer this simulation service by the end of 1999. For more information, contact Gary Walzer at 614-421-3440 or gwalzer@tarateccorp.com.

Use of Vacuum Furnaces Grows

As manufacturers in the aerospace, automotive and machinery industries adopt the use of more high performance metals, the demands on heat treatment, brazing and sintering processes grows. Manufacturers are pressing for continuously improved reliability and repeatability in their processes. Electrically heated vacuum furnaces have been found to meet these

demanding requirements and their use in these process areas is growing. Electric vacuum furnaces eliminate the environmental problems associated with salt bath furnaces, provide more precise control than traditional gas-fired furnaces and can reach higher processing temperatures than competing technologies. Members can learn more about this technology, the process fundamentals, advantages, relevant applications and which customers can use this technology in the new CMF TechCommentary, "Vacuum Furnaces for Heat Treating, Brazing, and Sintering" (TC-113555). (Click on the blue link to view the abstract and to download this publication).



Electrically heated vacuum furnaces can meet the demanding performance requirements of many metal heating operations.

UV-Cured Opaque Coatings Demonstrated on Wood

UV (ultraviolet)-curable coatings have been used for several years on a wide variety of wood products including flooring, shelving and selected furniture components. However, their use has been limited to clear coatings as UV energy cannot penetrate fully pigmented coatings (pigments provide the color in a paint or coating) to a sufficient depth to achieve full cure. E&J Industries, a manufacturer of wood moldings, brush blocks and tool grips, has recently demonstrated UV technology for curing opaque coatings on their products. While these coatings only provide a tint of color to the wood, they are a significant step forward in the further application of UV curing technology for wood product finishes. Members can learn more about this new UV application in the CMF TechApplication, "Opaque UV Curable Coatings for Wood Meets Manufacturer's Challenge" (TA-113570).

UPCOMING MEETING

New Applications of Microwave and Radio Frequency Processing to be Presented at Conference

Riding on the success of their initial effort, the Microwave Working Group and EPRI are completing plans for the Second World Congress on Microwave and Radio Frequency Processing. This congress will bring together equipment suppliers, industrial users and other key stakeholders to discuss current and new applications of these technologies. The central theme is "Bridging Science to Applications" and will have a strong emphasis on introducing new potential users to the many successful commercial applications of microwave and radio frequency heating. Plan now to attend and bring some of your industrial customers to the Second World Congress on April 2-6, 2000 in Orlando, Florida. For more information, contact Gary Walzer at 614-421-3440 or gwalzer@tarateccorp.com.

MATERIALS PRODUCTION

PROJECT UPDATES

Mining Conveyor Systems Marketing Kit

A marketing kit aimed at helping electric-utility sales personnel present the applications and advantages of conveyors in mining operations is now available online: "Mining Conveyor Systems Marketing Kit" (TR-113539).

Mining is a large heavy industry and a major consumer of electricity. The annual yield of U.S. mining production is about seven billion tons of ores valued at about $60 billion annually. Materials handling costs can be 40% to 50% of the overall mining operation costs. The kit identifies where conveyor systems can provide efficient material handling solutions including some "not so obvious" applications.
The marketing kit provides:

- An overview of the U.S. mining industry
- A description of the technology and types of electric conveyors
- A methodology for identifying where to use conveyors
- A review of the sales process, including an information gathering questionnaire and checklist
- A reference section on mining and conveyors
- A vendor list of major system suppliers
- A glossary of mining and conveyor terms

Using the kit together with the Center for Materials Production (CMP) Report, "Mine Transportation Selection Model" (CR-109362), a utility representative can formulate an overall marketing plan for conveyor systems in mines.

Please click on the blue links to view the abstracts and to download the above reports. For more information on this project, contact CMP through the EPRI Customer Assistance Center.

Power Quality Issues for Induction and Heating in Metals Production

Using its considerable knowledge and experience in power quality issues, EPRI PEAC (Power Electronics Application Center) is working with CMP to publish a TechCommentary on that subject as related to the operation of induction furnaces. The objective is to provide furnace operators and utility account representatives with a better understanding of power quality issues, design and specification guidelines for avoiding problems, and interface equipment suggestions to improve the furnace and power source match.
Induction heating and melting operations were selected for this study due to the broad application of induction technology, as well as the potential susceptibility of induction furnaces to harmonics, flicker, voltage sags and interruptions. For more information on this project, contact CMP through the EPRI Customer Assistance Center.

MUNICIPAL WATER & WASTEWATER

PROJECT UPDATE

Ozone for Wastewater Treatment

Ozone is an excellent disinfectant choice for potable water supplies and through the Ozone Efficiency Project, the Municipal Water and Wastewater (MWW) Program has been instrumental in improving the efficient use of this chemical in water treatment. However, ozone is rarely used in the U.S. for wastewater treatment because many regulatory agencies require disinfection of wastewater only during summer months and the high capital costs of ozone equipment make ozone hard to justify economically. With improvements in ozone generation equipment and its use in the potable water industry, ozone use in wastewater treatment is getting another look.

In separate studies in the northeast, the MWW Program is investigating the use of ozone for wastewater disinfection. The first study, completed at the Passaic Valley wastewater treatment facility in Newark, New Jersey, estimated the costs of implementing ozone at the plant. In addition, researchers conducted surveys at other plants throughout the U.S. In another study, EPRI and Central Hudson Gas & Electric are assessing the use of ozone to disinfect wastewater from Tannersville, New York. The wastewater is discharged into a high-quality receiving stream, so treatment standards are very high. Preliminary results show that ozone can produce a very high quality effluent, suitable for direct discharge to the stream. Final results are expected in January, 2000. For more information, contact John Murphy with the Community Environmental Center through EPRI Customer Assistance Center.

HEALTHCARE

PROJECT UPDATES

TC Project with ComEd: Great Lakes Naval Training Center

The EPRI Healthcare Initiative (HCI) and UV Technologies, Inc. has collaborated with ComEd to implement a pilot test with the Great Lakes Naval Training Center (GLNTC).

Background - Infectious diseases such as tuberculosis (TB), measles and influenza are transmitted through the air by an infected host (individual). These diseases are typically spread through pathogenic microorganisms that are attached to droplet nuclei found in the respiratory tract of an infected person. These droplets are also known as bio-aerosols (any particle, gas, vapor, or fragments of biological origins) as they become aerosolized. As a result of coughing, sneezing or even yelling, these contaminated droplet nuclei become airborne, thus capable of infecting individuals who inhale the contaminated droplets. Airborne droplet nuclei can remain suspended in ambient air for long periods of time, unless removed by some type of engineering control such as mechanical ventilation. Conventional mechanical ventilation for reducing microbial contamination include air replacement with outside air and/or the use of high efficiency particulate air (HEPA) filters. Conventional types of engineering controls are often energy intensive, therefore costly to operate and maintain. New approaches to a more cost-effective means of control include the use of ultraviolet germicidal irradiation (UVGI).

Objective - Various laboratory studies have determined that UVGI inactivates microbes. Understanding and documenting the efficacy of UVGI in an occupied setting was the basis of this study. The GLNTC project set out to determine the effectiveness of UVGI in its ability to eliminate human shed airborne microbes in a congregant setting utilizing the Viotec UV-C Air Disinfector. This fan driven device utilizes Type-C ultraviolet radiation (190-280nm). Prior research has concluded that UV-C inactivates microorganisms by damaging their DNA strands.

Discussion - The EPRI Healthcare Initiative Target continues to identify new and emerging electrotechnologies aiding in the reduction and control of the transmission of airborne diseases.

Through the outset of this study, we attempted to identify a reduction in respiratory illness in the recruits through the use of Viotec Disinfectors in an occupied setting. However, we were not able to statistically conclude through this study that this device was able to reduce illness in the study area. In addition, we did not see a statistically significant reduction in human shed bacteria in the study space compared to the control space. Unlike controlled studies where biological indicators are introduced into the device and measured at the inlet and outlet, many factors may have contributed to an inconclusive outcome for this study. Some of these factors may include air dilution through uncontrolled window opening and recruits being exposed to illness outside of the sample settings. In addition, the amount of total air exchanged per hour through the device for disinfection may not have been enough to be effective at bacterial elimination. Also, due to contamination of some of the field blanks, many of the results from air sampling during the winter had to be thrown out of the study.

Conclusion - Although this study did not meet the expected outcomes, additional data collection is necessary. The Emerging Illness Division of the Naval Health Research Center continues to collect data on illness rates among recruits housed in the study space compared to comparable divisions housed in the similar controlled spaces. The overall outcome of their health data will provide the much needed sample size to provide a proper statistical analysis. Also, without continuous air sampling for airborne biological contaminants, it would not be appropriate to conclude that the device does not meet the expectation of biological inactivation.

For more information about this project contact the HCI through EPRI Customer Assistance Center.

Hospital of the Future

Mercy Regional Medical Center of Laredo, Texas is a collaborative partnership with Central and Southwest Services (CSW), its subsidiary Central Power and Light (CP&L) and EPRI HCI. This partnership has provided a unique opportunity to develop an ongoing working relationship between a healthcare customer and a utility which will serve as a model for other healthcare and utility collaborations.

Several objectives were set at the beginning of this project, the most salient of which was to design a hospital that demonstrates an integrated approach to deploying electrotechnologies and thus serve as a demonstration site. The integrated technologies installed in the Mercy Regional Medical Center are as follows:

- Pneumatic Systems (covered in the October issue of this newsletter)
- High efficiency and Ultra Violet Germicidal Lighting Systems
- Ozonated Water Treatment Systems/ Cooling Water Towers and Laundry
- Side by Side Kitchens with an Energy Wall

Mercy Regional Medical Center was opened in August and the data on the technologies being used is currently being collected. The TechApplications and Reports based on that data are expected to be delivered by the end of the first quarter of 2000. Over the next few months, however, we will feature one of the above technologies used in this project and provide project updates on all four. Last month, we reviewed the Pneumatic System that was installed. This month we will review the Lighting Systems.

Lighting Systems (high efficiency and ultraviolet germicidal irradiation) - Mercy Regional Medical Center installed high efficiency (T8) lamps with electronic ballast throughout the facility. In addition to down-lighting, the hospital is equipped with ultraviolet germicidal irradiation (UVGI) to prevent the spread of tuberculosis and other airborne diseases in critical areas such as the emergency room waiting areas and the triage rooms. Also, UVGI has been installed in each of the surgery suites and surgery areas such as pre and post surgery and examination areas. The purpose of this is to determine the efficacy of UVGI in preventing or reducing the incidence of post-surgical infections and protecting employees during high-risk surgeries such as surgical procedures involving the lungs and respiratory tract.

For more information regarding "The Hospital of the Future" project, contact Joel Bauch of the EPRI Healthcare Initiative by phone, 800-424-3774 or email, jbauch@epri.com.

MEETING WRAP-UP

Fall HCI Conference

The Fall HCI Conference took place in Charleston, South Carolina on October 13-14. The meeting opened with a look to the future of healthcare. Dana Swensen and Mike Severns, both TeleHealth /TeleMedicine Board members of ASHE, spoke of the opportunities TeleHealth will provide to energy companies. The use of the existing broadband electronic distribution infrastructure by utilities can be capitalized upon for the transmission of this critical data. Mike and Dana view "Band Width" as the hot commodity for 2000 and beyond and think that utilities have an opportunity to capitalize on this right now. Currently cable companies are the frontrunners for distribution of broad band width transmission, but that does not need to be the only option available in the future. Much like phone lines were the first to carry modem transmissions, of which now cable is taking the lead, so

too can utilities utilize their resources and become leaders in distribution and transmission of electronic data.

The basis of TeleHealth and TeleMedicine is to define and develop not only the infrastructure, but the integration of all the highly technical equipment, both medical and support tools such as computers, within the facility itself. Therefore, they see a new job position emerging within hospitals on which EPRI could capitalize by providing technical management of all systems within a hospital: HVAC, lighting, telecommunications, power quality, etc. HCI is exploring the scope of these opportunities and will provide more information at the February meeting in San Antonio, Texas.

The business session of this conference was to determine the types of products and services HCI would offer its members in 2000 and beyond. The screening tool was one of the most valuable tools that resulted from this meeting. The screening tool establishes a set of criteria HCI products and services must satisfy before being considered for funding. The screens will be weighted by the task force that has been established for just this purpose. The task force will test the screening method and weighting procedure on HCI's 1999 deliverables. At our February meeting in San Antonio, the membership at large will apply the screens to our 2000 offering and assess their applicability.

Please click here to view agenda and meeting notes for this meeting. For additional information regarding the Fall HCI Conference contact Kelly Ciprian of the EPRI Healthcare Initiative at 614-855-1390 or kciprian@epri.com.

AGRICULTURE

MEETING WRAP-UPS

ATA & FTA Semi-Annual Joint Meeting

The Agricultural and Food Technology Alliances (ATA & FTA) held their semi-annual joint meeting on October 11-13, 1999, in Minneapolis, Minnesota, to review the status of current agricultural and food projects, evaluate new proposals and conduct Steering Committee business. Other activities at the meeting, hosted by Northern States Power, included a roundtable exploration on the status of the Agri-Food Industry, ozone case studies and aquaculture training workshops, biochemistry and agricultural engineering tours to the University of Minnesota campus, and presentations of current Agricultural and Food Science Programs by University of Minnesota faculty.

During the Roundtable Exploration, six corporate leaders and academicians presented overviews on various topics including electronic pasteurization of foods, membrane technologies for industrial processes, ozone odor treatment commercialization and using ozone fumigation for grain disinfestation.

Subcommittee reports and recommendations were referred to the ATA/FTA Steering Committees during the October 13th business session. The Steering Committees accepted the reports and recommendations, completed the voting procedure where necessary and forwarded their recommendations to EPRI for consideration. The Steering Committees accepted the invitation from Bill Orendorff, Tri-State G&T, to hold the spring meeting in Denver, Colorado, May 1-3, 2000.

Special Recognition - Utility representative, Dennis R. St. George, Manitoba Hydro, was recognized by the Agricultural Technology Alliance at the Fall ATA/FTA Meeting in Minneapolis for his outstanding service to the Alliance. Mr. St. George was honored for his continuing support of the Alliances and most especially for his commitment and work involved with the McLeod Harvest Method, a research project funded in part by EPRI.

The Ozone Conference II: Pre- and Post-Harvest Applications

The Ozone Conference II: Pre- and Post-Harvest Applications Two Years after GRAS, sponsored by the Agricultural Technology Alliance and Southern California Edison's AgTAC facility, was held September 27-28, 1999, at the AgTAC facility in Tulare, California. One hundred seventy-five registrants and attendees were present at the day and half conference. During the conference, twenty-two presentations were given on ozone food processing and agricultural applications. Presentations included the following topics:

- Ozone fumigation
- Ozone generation techniques
- System and design applications
- Prewater treatment requirements
- Poultry water reuse
- Soil treatments with ozone gas
- Post-harvest aqueous and gaseous ozone research results

The conference featured a live videoconference between Tulare, California and Washington, DC to discuss the federal regulators' view on ozone applications. An Abstract Report of the Proceedings will be available by December 31, 1999. For additional information, contact the EPRI ATA Office through the EPRI Customer Assistance Center.

FOOD

MEETING WRAP-UP

Fall Food and Agricultural Technology Alliances Meeting

Seventy-eight people attended the Fall Food and Agricultural Technology Alliances Meeting held October 11-13, 1999 in Minneapolis, Minnesota. The meeting, hosted by Northern States Power, began with a Roundtable Exploration on the Status of the Agri-Food Industry which featured leaders from corporate industry and academia discussing membrane applications in food processing, electronic pasteurization of foods, wastewater treatments for food agriculture, and ozone applications in odor control and fumigation for grain disinfestation.

The meeting also included two workshops: Ozone Equipment and Recent Case Studies and Aquaculture Training, field trips to the University of Minnesota campus to view recent developments in genetic engineering of food and agricultural products and waste management and odor control research, and two sessions led by University of Minnesota faculty reviewing Minnesota Food Science and Agricultural programs.

Following the subcommittee sessions on October 12 to review current projects and evaluate proposals, the FTA subcommittees convened on October 13 with the ATA subcommittees and made recommendations to the FTA and ATA Steering Committees. Steering Committee recommendations were forwarded to EPRI.

Final actions included accepting an invitation from Bill Orendorff, Tri-State G&T, to meet in Denver, Colorado, May 1-3, 2000 for the Spring AFTA meeting.

Special Recognition - G. T. (Tedd) Battles, TVA, was recognized and honored by the Food Technology Alliance for his continuing support and promotion of research in food processing technologies. Mr. Battles has provided insight and technical guidance to the FTA in the areas of wastewater management technologies, ozone, and electron-beam and nonthermal pasteurization in food processing. The FTA presented Mr. Battles with a plaque recognizing his long-term commitment to the Alliance.

UPCOMING MEETING

Midwest Food Processors Association, Inc., 95th Annual Convention & Midwest EXPO '99

Plan to attend the Midwest Food Processors Association, Inc., 95th Annual Convention & Midwest EXPO '99, December 1-2, 1999 at the Midwest Express Center, Milwaukee, Wisconsin. This will be an opportunity to learn about EPRI's support of the food processing industry in partnership with electrical member utilities, as well as learn about EPRI sponsored agricultural R&D projects.

A model of the EPRI Mobile Test and Demonstration Unit (MTDU) will be on display, representing the 48-ft by 8-ft trailer which is equipped with pilot test equipment for demonstration of state-of-the-art industrial process water treatment technologies such as air flotation, cross-flow membrane filtration and ozonation. The trailer travels to food processing companies to help them find solutions to problems in the areas of valuable solids recovery, liquid recycling, wastewater discharge cost reduction and water conservation. Since 1992, the MTDU has been at forty-four test sites nationwide and is available for site testing in 2000.

For additional information, contact the EPRI FTA Office through the EPRI Customer Assistance Center.

COMMUNICATIONS PRODUCTS

INSTRUCTIONS FOR VIEWING ALL HYPERLINKED COMMUNICATIONS PRODUCTS

The communications products listed below are available on-line. Just click your mouse on any of the products listed to access the publications on EPRI.com. Follow EPRI.com instructions for printing, ordering and downloading the products of your choice.

NEW COMMUNICATIONS PRODUCTS		
OI#	**TITLE**	**DIST. DATE**
Materials Fabrication		
TA-113570	Opaque UV Curable Coatings for Wood Meets Manufacturer's Challenges	Oct-99
Healthcare		
NL-112791	Power Prescription for Healthcare - August, 1999	Nov-99
NL-112792	Power Prescription for Healthcare - October, 1999	Nov-99
TR-113770	Interim Life Safety Measures: Their Application in a Healthcare Setting	Oct-99
TR-113841	Waste Minimization in the Healthcare Industry: A Resource Guide	Oct-99
TR-113845	Emergency Power Generation in Healthcare Facilities	Oct-99
Agriculture and Food		
TC-113814	Ozone in the Food and Agriculture Industries	Nov-99
TR-113701	Resource Guide for Food Irradiation	Oct-99
Chemicals, Petroleum & Natural Gas		
TE-114024	Supply Side Management Kit: Service for Energy Suppliers & Process Industry Customers	Oct-99
TR-113836	Electrotechnology Opportunities in Enhanced Oil Recovery Operations: Scoping Study	Oct-99
Fiber, Apparel, Carpet & Textiles		
TE-114130	Microwave Drying of Sweater Fabrics - Plant Trials: Tony's Brushing & Processing, Brooklyn, NY	Nov-99

PREVIOUSLY ANNOUNCED PRODUCTS NOW ON-LINE		
OI#	**TITLE**	**DIST. DATE**
Materials Fabrication		
TA-112685	UV Curable Coatings for Wood Meet Manufacturer's Challenges: TechApplication	May-99
TA-112686	Electric IR Booster Speeds Aluminum Aging Process: TechApplication	May-99
TA-113570	Opaque UV Curable Coatings for Wood Meets Manufacturer s Challenge	Oct-99
TC-113555	Vacuum Furnaces for Heat Treating, Brazing and Sintering	Sep-99
Materials Production		
PS-112177	High-Efficiency Aluminum Melter	Dec-98
TR-113539	Mining Conveyor Systems Marketing Kit	Aug-99
Healthcare		
BR-107072-R2	EPRI Healthcare Initiative Products and Services Catalog 1999	Jan-99
TR-113357	June Conference Manual	Jul-99
Municipal Water and Wastewater		
PO-112662	Ultraviolet Disinfection Optimization Project	May-99
TC-112661	Technologies for the Desalination of Brackish Water and Seawater	Jun-99
TC-113030	Issues for Ozone for Drinking Water Treatment	Jun-99
Agriculture and Food		
NL-113173	Food Industry Currents, Volume 3, Number 3	Jun-99
TA-112717	Freshwater Recirculating Aquaculture Facility: TechApplication	May-99
TB-112663	Variable Frequency Drives for Controlling Agriculture Ventilation Fans	Apr-99
Fiber, Apparel, Carpet & Textiles		
PO-111957	Microwave Drying of Textile Products	Mar-99

EPRI INDUSTRIAL AND AGRICULTURAL TECHNOLOGIES & SERVICES

BUSINESS SUMMARY:

Responding to the needs of EPRI members and their customers, activities focus on being the Business Partner of our members by delivering products and services that provide competitive advantages in the marketplace:

- *Supporting Customer Retention and Competitiveness*
- *Growing Electricity Market Share*
- *Offering New Business Opportunities*
- *Increasing Customer Value of Electricity*
- *Providing Customers with Energy Solutions*

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EPRI INDUSTRIAL CALENDAR OF EVENTS

1999

Dec 1-2	Midwest Food Processors Assn. 95th Annual Convention & Midwest EXPO '99	Milwaukee, WI

2000

Jan 18-21	**Industrial & Agricultural Product Line Council Meeting**	**Long Beach, CA**
Feb 7-8	Municipal Water & Wastewater Program Meeting	Long Beach, CA
Feb 9	Water & Energy Conference	Long Beach, CA
Feb 22-24	**Winter Healthcare Initiative (HCI) Conference**	**San Antonio, TX**
Mar 8-10	**PDC/ASHE Conference**	**Nashville, TN**
Apr 2-6	Second World Congress on Microwave & Radio Frequency Processing	Orlando, FL
Apr 4-6	**Industrial Energy Technology Conference**	**Houston, TX**
Apr 12-13	Board of Directors Annual Meeting	Washington, DC
May 1-3	AFTA (Agricultural & Food Technology Alliance) Spring Meeting	Denver, CO
May 22-26	CEM Users Group Meeting 2000	San Antonio, TX
Jun 19-23	**Industrial & Agricultural Product Line Council Meeting**	**Orlando, FL**
Jun 21	Water & Energy Conference	Minneapolis, MN
Jun 22-23	Municipal Water & Wastewater Program Meeting	Minneapolis, MN
Jul 10-13	**ASHE 37th Conference & Technical Exhibition**	**Seattle, WA**
Oct (TBA)	Municipal Water & Wastewater Program Meeting	Dallas, TX
Oct (TBA)	Water & Energy Conference	Dallas, TX
Nov 2-4	Second EPRI European Conference	Vienna, Austria

Calendar items in bold have been revised or added since last month's Calendar of Events